

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
17 May 2001 (17.05.2001)

PCT

(10) International Publication Number
WO 01/34371 A2

(51) International Patent Classification⁷: **B29C 67/00**

MA 01772 (US). CLARK, Sarah, L.; 91 Magazine Street, Apt. D1, Cambridge, MA 02139 (US). DICOLOGERO, Matthew; 76 Greenleaf Avenue, Medford, MA 02155 (US).

(21) International Application Number: PCT/US00/30347

(74) Agent: ENGELSON, Gary, S.; Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA 02210 (US).

(22) International Filing Date:
3 November 2000 (03.11.2000)

(81) Designated States (national): CA, JP.

(25) Filing Language: English

(84) Designated States (regional): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).

(26) Publication Language: English

Published:

— *Without international search report and to be republished upon receipt of that report.*

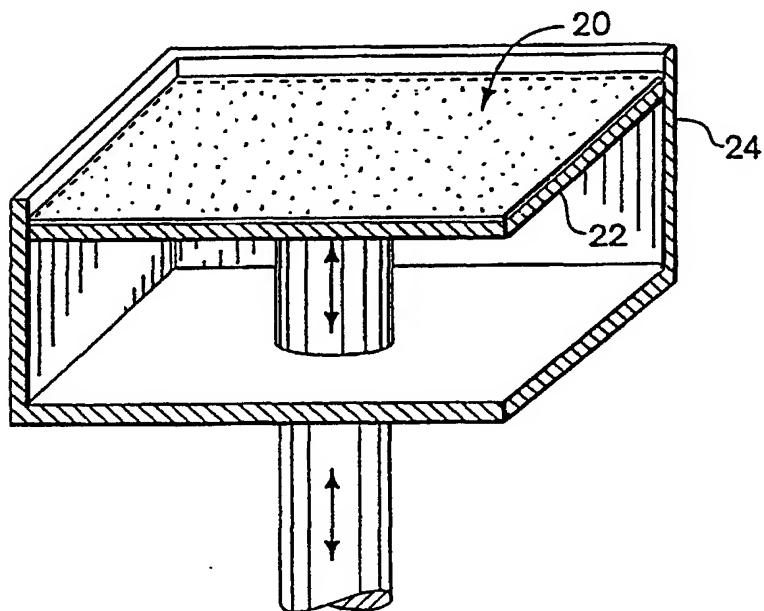
(30) Priority Data:
60/164,000 5 November 1999 (05.11.1999) US

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(71) Applicant: Z CORPORATION [US/US]; 35 Medford Street #213, Somerville, MA 02143 (US).

(72) Inventors: BREDT, James, F.; 73 Templeton Parkway, Watertown, MA 02172 (US). ANDERSON, Timothy, C.; 155 Webster Avenue, Apt. 3, Cambridge, MA 02141 (US). RUSSELL, David, B.; 12 Winchester Street, Southboro,

(54) Title: MATERIAL SYSTEMS AND METHODS OF THREE-DIMENSIONAL PRINTING



WO 01/34371 A2

(57) Abstract: The present invention is directed to three-dimensional printing material systems and method, and an article made therefrom. The method of the present invention includes building cross-sectional portions of a three-dimensional article, and assembling the individual cross-sectional areas in a layer-wise fashion to form a final article. The individual cross-sectional areas are built by using an ink-jet printhead to deliver a fluid to a particulate material that includes particulate material.